

## **Abstract**

A cathode structure for vacuum sputtering machine is used for the sputtering process to be applied as a cathode structure for physical vapor deposition system. The cathode structure has the special function to modulate the assistant magnetic field to cause the consumption of target bar being very uniform. The cathode structure can fit the existing sputtering system to be provided in the application of deposition of electrical plasma material. The invention is usable in the field of electrical plasma deposition to substrate object (such as the application on the glass substrate or wafer). The life period of the target bar can be extended very long by using the invention from comparison with the conventional cathode structure. The cathode structure of the invention comprises a generator of assistant magnetic field, a target bar and a interference magnetic strip.